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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,875	01/07/2002	Peter S. Mautino	MCT 01501	4951
5073	7590	07/16/2007	EXAMINER	
BAKER BOTTS L.L.P.			LE, MARK T	
2001 ROSS AVENUE			ART UNIT	
SUITE 600			PAPER NUMBER	
DALLAS, TX 75201-2980			3617	
			NOTIFICATION DATE	DELIVERY MODE
			07/16/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mike.furr@bakerbotts.com  
ptomail1@bakerbotts.com

<b>Office Action Summary</b>	Application No. 10/041,875	Applicant(s) MAUTINO ET AL.	
	Examiner Mark T. Le	Art Unit 3617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Exhibit A</u> .                        |

### DETAILED ACTION

1. This communication is responsive to the RCE filed on May 17, 2007.

Applicant's amendments and arguments have been carefully considered, but are deemed moot in view of the new grounds of rejection below.

2. Claims 1-6 and 11-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 13 and 15, in the last paragraph, the expression "...tangential to an intermediate area of the enhanced bearing surface area substantially flat portion substantially arcuate in the horizontal direction ..." is not clear.

Correction is required.

3. Claims 1, 5-6, 10-17 and 19 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Thrift (US 5,050,751).

Thrift, Figures 6, shows coupler knuckle 30 (20) similar to that recited in the instant claims, including a mid portion that is a hub section having coupler pin hole 21, a tail section positioned to the right of the hub section, a front face section positioned to the left and forwardly of pin hole 21; wherein, said front face section includes a nose section which is the portion farthest from the pin hole 21, and a pulling face section that is located inwardly of the nose section. The coupler knuckle of Thrift also includes a transition section located between the tail section and the hub section and having converging top and bottom surfaces. Note that the bearing surface area defined by at least a portion of pulling face section and the nose section of Thrift is substantially flat in

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the vertical direction and substantially arcuate in the horizontal direction, as broadly defined in the instant claims.

Regarding the instant claimed coupler knuckle being made of metal or cast steel, and the opening in the nose section, i.e. the opening represented by the circle shown in Figure 6 of Thrift, being a cylindrical opening, note that such features are generally the basic features of conventional coupler knuckles (Official Notice is taken). Therefore, it would have been obvious to one skilled in the art to include such basic features of conventional coupler knuckles in the coupler knuckle of Thrift so as to achieve expected advantages thereof.

Regarding the instant claimed hardness being at least about 40 Rockwell C, it would have been obvious to one skilled in the art, i.e. a designer in the field, to optimize the capacity of the coupler knuckle of Thrift by constructing the bearing surface area thereof with an increased hardness so as to make it suitable for withstanding applications associated with higher load limits.

Regarding the instant claimed step of retrofitting, as recited in the preamble of claim 15, it does not carry patentable weight because such step does not provide a clear structural distinction over the prior art structure.

4. Claims 2-4 and 18 (as best can be determined) are rejected under 35 U.S.C. 103(a) as being unpatentable over Thrift (US 5,050,751) in view of Metzger (US 2,585,958).

Thrift is applied above.

Regarding the instant claimed various predetermined lengths or distances of the substantially flat portion in the vertical direction, as recited in instant claim 2-4, it is noted that the pulling face or bearing surface of Thrift is generally straight or flat to the full height of the coupler knuckle, but alternatively in Metzger, Figure 1, the corresponding bearing surface is significantly tapered at both the bottom and the top portions, such that the lengths of the straight or flat portion is significantly reduced. In view of the alternative teachings of both Thrift and Metzger, it would have been obvious to one skilled in the art to alternatively set predetermined lengths for the straight portion and the tapered portions of the pulling face or bearing surface of Thrift so as to achieve predictable results from a compromise between the relative lengths of the straight portion and the tapered portions.

5. Claims 1-6 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanula (US 4,645,085).

Hanula discloses a coupler knuckle similar to that recited in the instant claims, including an enhanced bearing surface with a configuration as recited in the instant claims. See the attached copy of Figures 2 and 4 of Hanula - Exhibit A.

Regarding the instant claimed coupler knuckle being made of metal or steel, and the opening in the nose section, i.e. the opening represented by the circle shown in Figure 2 of Hanula, being a cylindrical opening, note that such features are generally the basic features of conventional coupler knuckles (Official Notice is taken). Therefore, it would have been obvious to one skilled in the art to include such basic features of

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conventional coupler knuckles in the coupler knuckle shown in Hanula so as to achieve expected advantages thereof.

Regarding the instant claimed hardness being at least about 40 Rockwell C, it would have been obvious to one skilled in the art, i.e. a designer in the field, to optimize the capacity of the coupler knuckle shown in Hanula by constructing the bearing surface area thereof with an increased hardness so as to make it suitable for withstanding applications associated with higher load limits.

Regarding the instant claimed step of retrofitting, as recited in the preamble of claim 15, it does not carry patentable weight because such step does not provide a clear structural distinction over the prior art structure.


Regarding the instant claimed distance/length of the flat portion, as recited in instant claims 2-4, it is noted that the corresponding bearing surface of the structure shown in Hanula is significantly tapered at both the bottom and the top portions, such that the lengths of the straight or flat portion is significantly reduced; and Hanula does not specify the distance/length of said flat portion. However, it would have been obvious to one skilled in the art to select particular lengths for the straight portion and the tapered portions of the pulling face or bearing surface of structure shown in Hanula so as to achieve predictable results from a compromise between the relative lengths of the straight portion and the tapered portions.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark T. Le whose telephone number is 571-272-6682. The examiner can normally be reached on Mon-Fri, between 9AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Mark T. Le  
Primary Examiner  
Art Unit 3617

mle  
6/29/07

